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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/776,756	02/11/2004	Oleksiy P. Sergyeyenko	TN-09606	3618
7590	12/29/2004		EXAMINER	
Black & Decker Inc. 701 E. Joppa Road, TW-199 Towson, MD 21286			FULTON, CHRISTOPHER W	
			ART UNIT	PAPER NUMBER
			2859	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No. 10/776,756	Applicant(s) SERGYEYENKO ET AL.	
	Examiner Christopher W. Fulton	Art Unit 2859	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-15 is/are allowed.
- 6) ☒ Claim(s) 1-12 and 16-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Objections*

1. Claims 6-8 are objected to because of the following informalities: Claim 6 lacks antecedent basis for "the second laser diode" in line 2 of the claim. Claim 7 lacks antecedent basis for "the second planar beam" in line 1 of the claim. Claim 7 lacks antecedent basis for "the second planar beam" in line 1 of the claim. Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
4. Claims 1-3, 9, and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al.

The device as claimed is substantially disclosed by Huang et al with a housing 21, a first shaft 312 connected to the housing, a bearing 317 disposed on the first shaft, a gimbal body 311 disposed on the bearing, a second shaft 3100 connected to the gimbal body, a pendulum 3212 on the second shaft, a first laser diode 40 disposed on the pendulum, and a first line lens 44 for converting a laser beam emitted by the first laser diode into a first planar beam forming a horizontal line, but lacks the bearing 317 being two bearings and a bearing between the second shaft and the pendulum or with respect to claim 9 two bearings on the second shaft. Bearings are old and well known means to reduce friction in pivoting members. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use one or multiple bearings on the shafts of Huang et al to reduce the friction of the pivotal coupling.

5. Claims 4-8, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al as applied to claims 1-3, 9, and 10 above, and further in view of Le.

The device as claimed is disclosed by Huang et al as stated in the rejection recited above for claims 1-3, 9, and 10, but lacks a second laser diode and second lens to form a second planar beam orthogonal to the first beam. Le teaches using a second laser diode 31 or 32 and second lens 51 or 52 to form a second planar beam H1 or V1 on a pendulous member to form a vertical and horizontal line on a working surface. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a second laser diode and second lens to form a second planar beam orthogonal to the first beam in Huang et al as taught by Le to form a vertical and horizontal line on a working surface.

6. Claims 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Huang et al as applied to claims 1-3, 9, and 10 above, and further in view of Speer.

The device as claimed is disclosed by Huang et al as stated in the rejection recited above for claims 1-3, 9, and 10 with the first pin being either the one of the shafts (claim 16) or member 32 (claim 18) which is retractable and the second pin being the second shaft, but lacks a rack and pinion arrangement to move members relative to each other. Speer teaches using rack 54 and pinion 52 arrangement to move two items relative to each other. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add a rack and pinion arrangement to Huang et al between the laser diode and housing as taught by Speer to adjust the position of the laser and between the retractable pin 32 and the housing as taught by Speer to adjust the position of the retractable pin.

With respect to claims 23 and 24 magnetic mounting means are old and well known to readily mount devices on metallic surfaces. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use magnets to mount the device of the combination of Huang et al and Speer together to mount the device on a metal surface.

*Allowable Subject Matter*

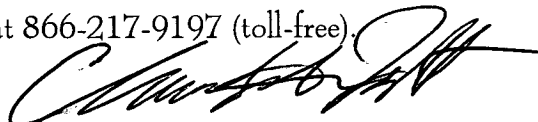
7. Claims 13-15 are allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher W. Fulton whose telephone number is (571) 272-2242. The examiner can normally be reached on M-Th 5:30-3:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Diego F.F. Gutierrez can be reached on (571) 272-2245. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Christopher W. Fulton  
Primary Examiner  
Art Unit 2859

CWF